Buschings Bridge Versailles Ripley Coonty Indiana

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Busching Covered Bridge HAER IN-33 (Page 1)

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## HISTORIC AMERICAN ENGINEERING RECORD

## Busching Covered Bridge

HAER IN-33

Location:

Spanning Laughery Creek on Covered

Bridge Road, 0.7 miles east of

Versailles.

UTM: 16.652450.4325560 Quad: Milan, Indiana

Date of Construction:

1885

Present Owner:

Significance:

The Busching Bridge is a typical

example of the Howe truss.

**Historians:** 

Robert Rosenberg Donald Sackheim

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Spanning Laughery Creek, the Busching Covered Bridge is located east of the village of Versailles, Indiana. The Busching Bridge was erected in 1855 by Thomas A. Hardman, a local builder who later achieved notoriety by rebuilding many of the bridges in Oearborn and Ripley Counties destroyed by the Confederate raider John Hunt Morgan. The Busching Bridge is a typical example of the Howe truss, a design which signaled the start of metal construction in bridge building.

The Howe truss system was the product of the imagination of William H. Howe. Born into a family of inventors in 1803, he worked as a millwright before patenting his truss system in 1840.

The patented innovation introduced in the Howe truss was the use of iron bars as tension members. The use of the iron bars and turnbuckles made it possible to regulate the tension and overcome separation of the upper and lower cords, a problem frequently encountered in allwood bridges. Though the use of iron tension members was a real step forward, a number of spectacular railroad bridge failures in the min-nineteenth century forced the adoption of all-metal truss construction. The wood and metal design remained workable in some rural areas.

The Busching Bridge, which is still in use, is a modified Howe truss composed of 15 irregular bays with a clear span of 170 feet. Both the wooden x-bracing, which is in compression, and the metal tie rods, which are in tension, are of different dimensions: by varying the sizes and dimensions of the structural members, the truss expresses its sophisticated design. The height from peak to roadbed is 23 feet.

## Busching Covered Bridge

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